

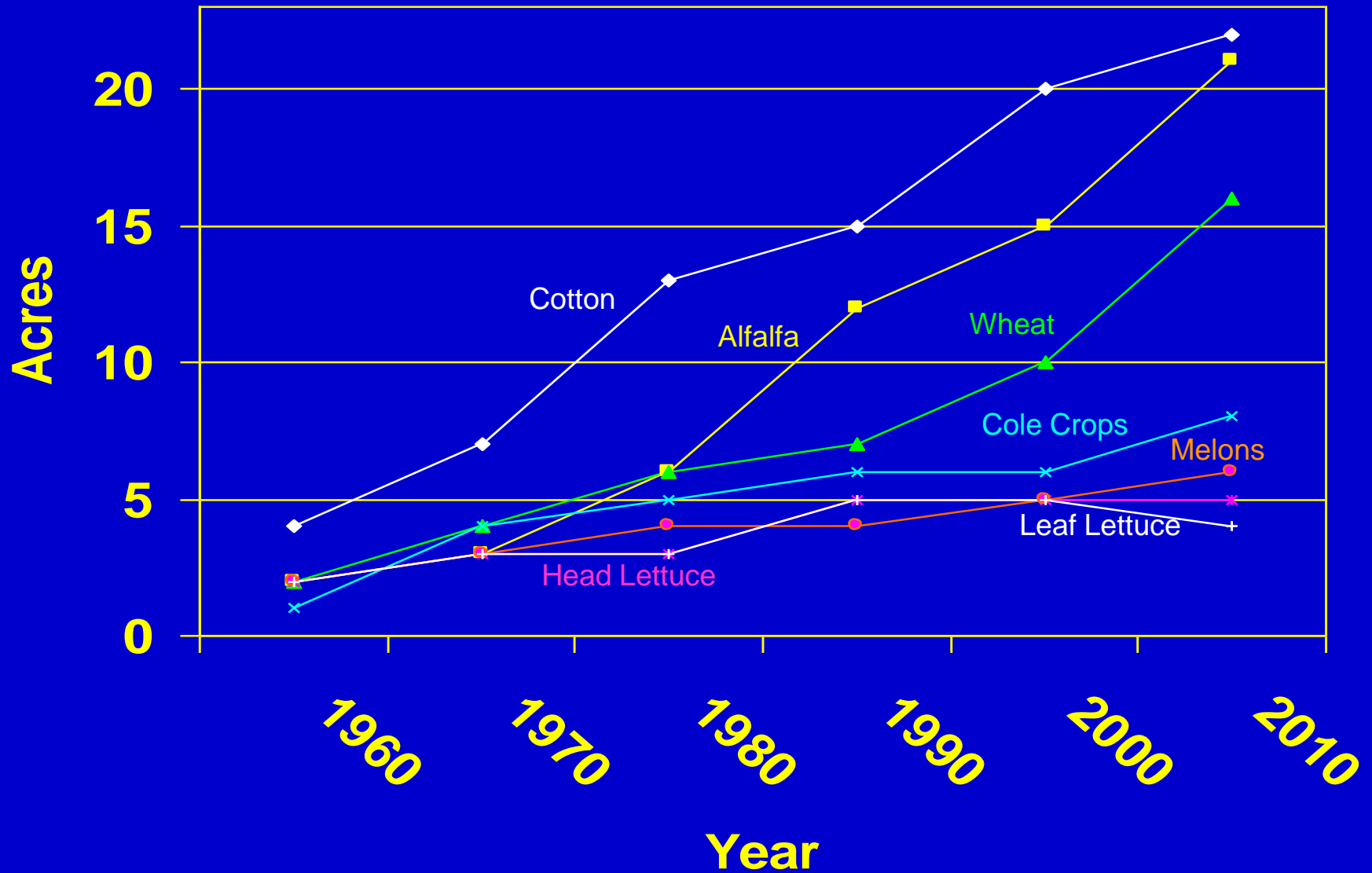
Using Melon Herbicides Effectively

Barry Tickes
University of Arizona
Yuma Agricultural Center





Herbicide Registrations



Melon Herbicides

Treflan	trifluralin	1967
Prefar	bensulide	1968
Dacthal	DCPA	1970
Curbit	ethafluralin	1994
Poast	sethoxydim	1988
Select	clethodim	1997
Sandea	halosulfuron	2004

Melon Herbicides Arizona and California

Herbicide	CA/AZ	Year first registered or expected	Available as a generic	Grasses		Mustards		Goosefoot		Sunflower			Nightshade		Other			Comments
				Summer Annual	Winter annual	London Rocket	Shepardspurse	Lambsquarters	Nettleleaf Goosefoot	Sowthistle	Sunflower	Prickly Lettuce	Groundcherry	Silverleaf Nightshade	Purselane	Malva	Pigweed	
Triflualin	CA/AZ	1967	Y	●	●	○	○	●	●	○	○	○	○	○	●	○	●	Apply layby and incorporate after crop has 4-5 leaves.
Bensulide	CA/AZ	1968	N	●	●	○	○	◐	●	○	○	○	○	○	●	○	●	Apply after planting and incorporate with enough sprinkler irrigation to push down to germinating weeds.
DCPA	CA/AZ	1970	N	●	○	◐	◐	●	●	◐	◐	○	●	●	●	◐	●	Apply after crop has 4-5 leaves and incorporate with adequate irrigation or tillage.
Sethoxydim	CA/AZ	1988	Y	●	●	○	○	○	○	○	○	○	○	○	○	○	○	Will not control annual bluegrass or Sprangletop. Add crop oil.
Ethalfuralin	CA/AZ	1994	Y	●	●	○	○	○	○	◐	◐	◐	○	◐	○	○	●	Crop injury can occur if herbicide contacts germinating crop seed because of shallow planting or herbicide movement with water.
Clethodim	CA/AZ	1997	Y	●	●	○	○	○	○	○	○	○	○	○	○	○	○	Will control annual bluegrass and Sprangletop at highest rate. Can use either crop oil or nonionic surfactant with Select Max.
Halosulfuron	CA/AZ	2004	N	○	○	●	●	○	●	●	●	●	●	◐	●	●	◐	Controls some weeds only preemergence, some only postemergence and some both. Multiple applications often needed. Plantback restrictions.

- Good Control
- ◐ Partial Control
- No Control

Melon Herbicides Arizona and California

Herbicide	CA/AZ	Year first registered or expected	Available as a generic	Grasses		Mustards		Goosefoot	Sunflower			Nightshade		Other			<ul style="list-style-type: none"> ● Good Control ◐ Partial Control ○ No Control 		
				Summer Annual	Winter annual	London Rocket	Shepardspurse	Lambsquarters	Nettleleaf Goosefoot	Sowthistle	Sunflower	Prickly Lettuce	Groundcherry	Silverleaf Nightshade	Purselane	Malva		Pigweed	Comments
Triflualin	CA/AZ	1967	Y	●	●	○	○	●	●	○	○	○	○	○	●	○	●	Apply layby and incorporate after crop has 4-5 leaves.	
Bensulide	CA/AZ	1968	N	●	●	○	○	◐	●	○	○	○	○	○	●	○	●	Apply after planting and incorporate with enough sprinkler irrigation to push down to germinating weeds.	
DCPA	CA/AZ	1970	N	●	○	◐	◐	●	●	◐	◐	○	●	●	●	◐	●	Apply after crop has 4-5 leaves and incorporate with adequate irrigation or tillage.	
Halosulfuron	CA/AZ	2004	N	○	○	●	●	○	●	●	●	●	●	●	◐	●	●	◐	Controls some weeds only preemergence, some only postemergence and some both. Multiple applications often needed. Plantback restrictions.

Dacthal

- 1958 – Registered by Fermenta
- 1990 – Acquired by ISK Biotech Corp.
- 1997 – Manufacturing discontinued
- 2000 – Acquired by Amvac Chemical Corp.

Dacthal



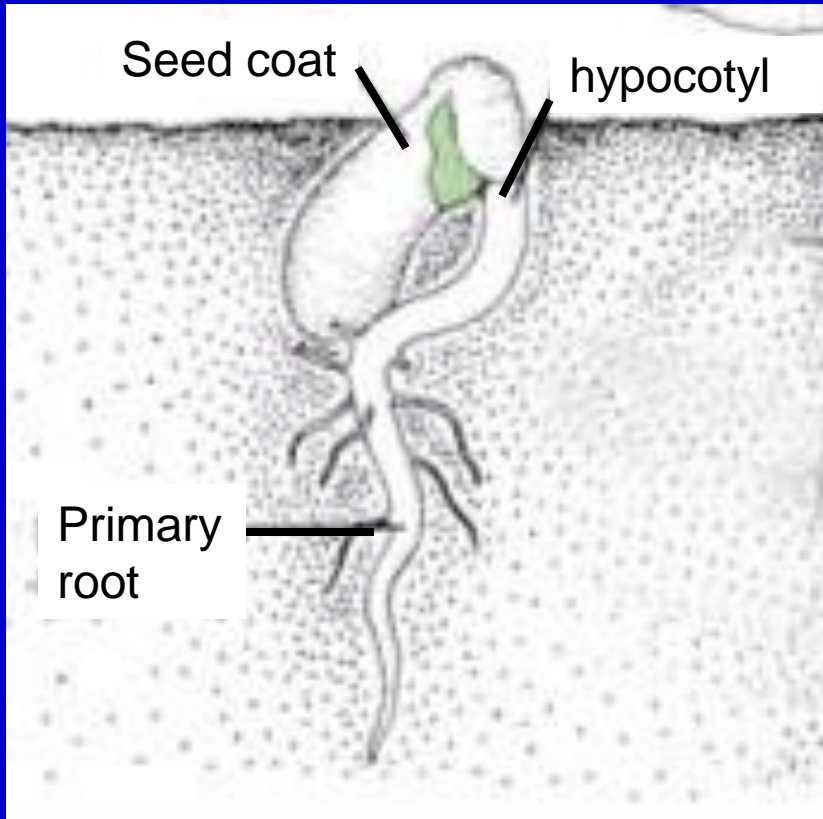
DACTHAL FLOWABLE

DACTHAL FLOWABLE

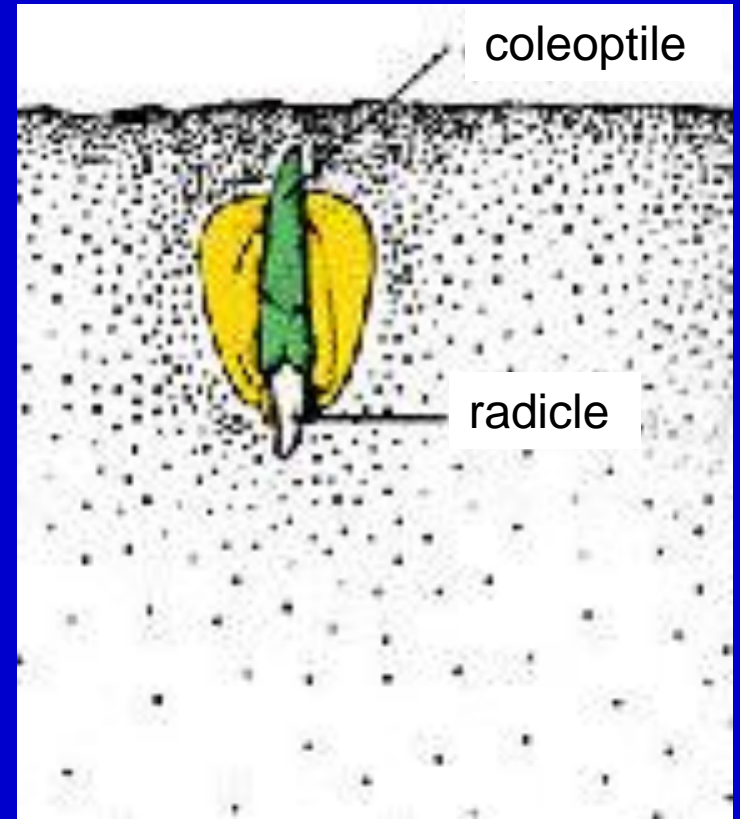


DACTHAL W 75

Dacthal W 75



Broadleaf



Grass

Herbicide Adsorption(Koc)

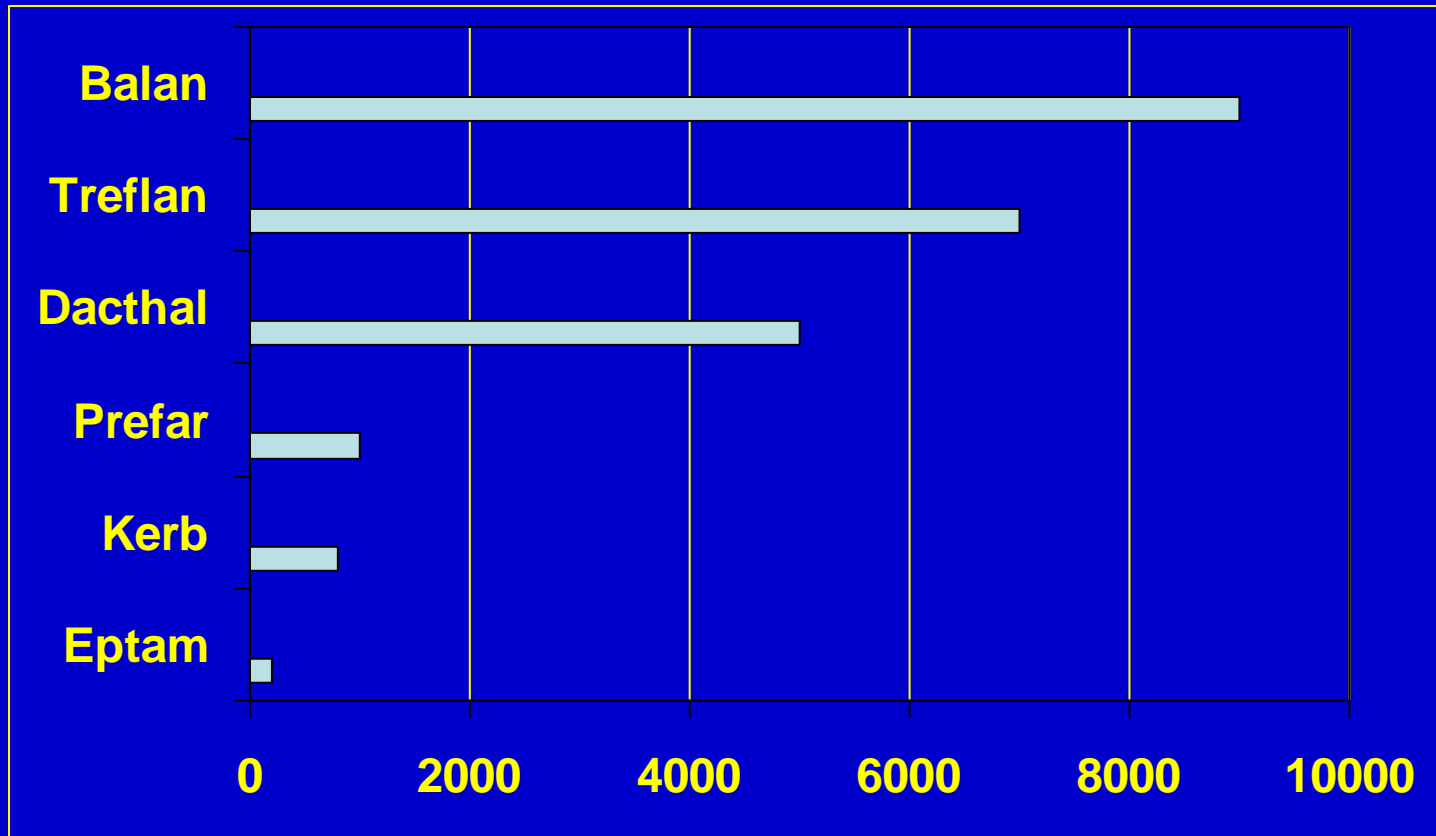
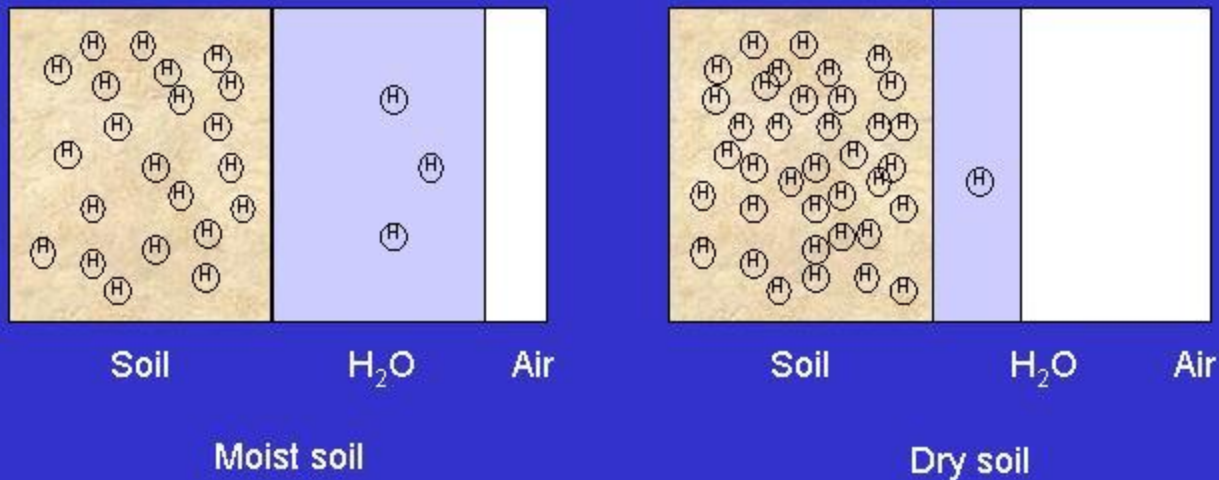


Figure 2. Soil moisture effect on herbicide availability.





Furrow Irrigated



Sprinkler Irrigated



Untreated



Dacthal 8lbs.



Untreated

Untreated

Prefar
6 qts.



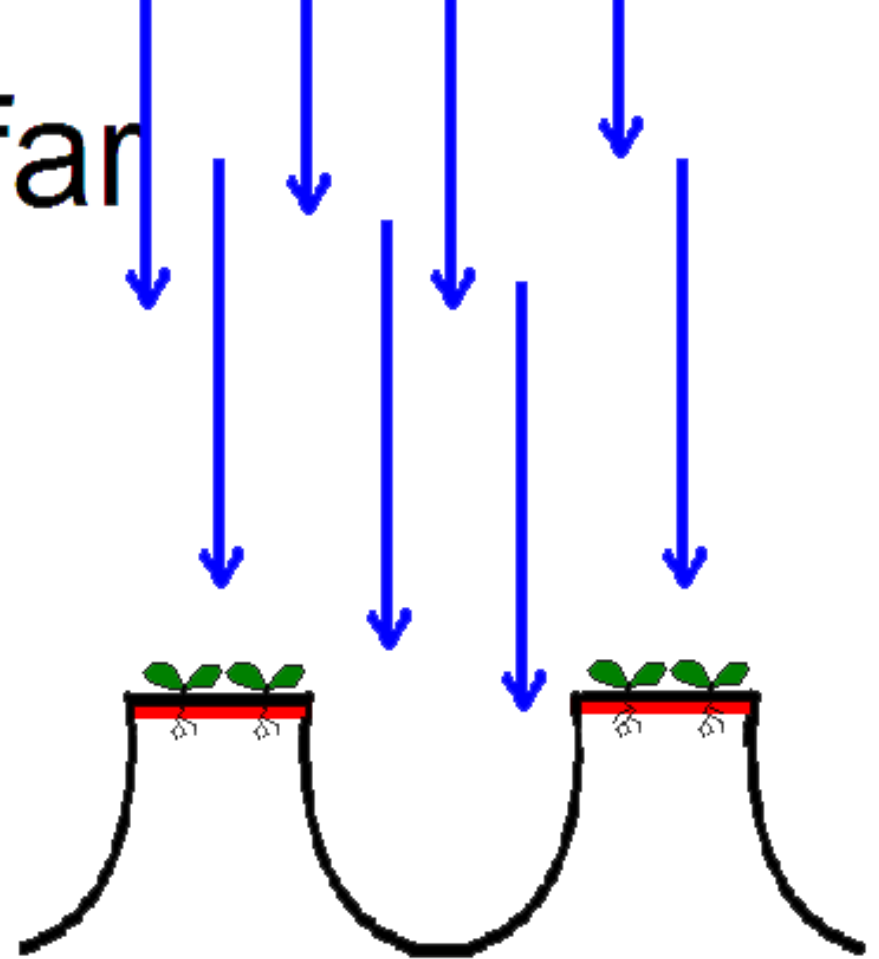


Prefa
pre 6 8

Prefar



Furrow

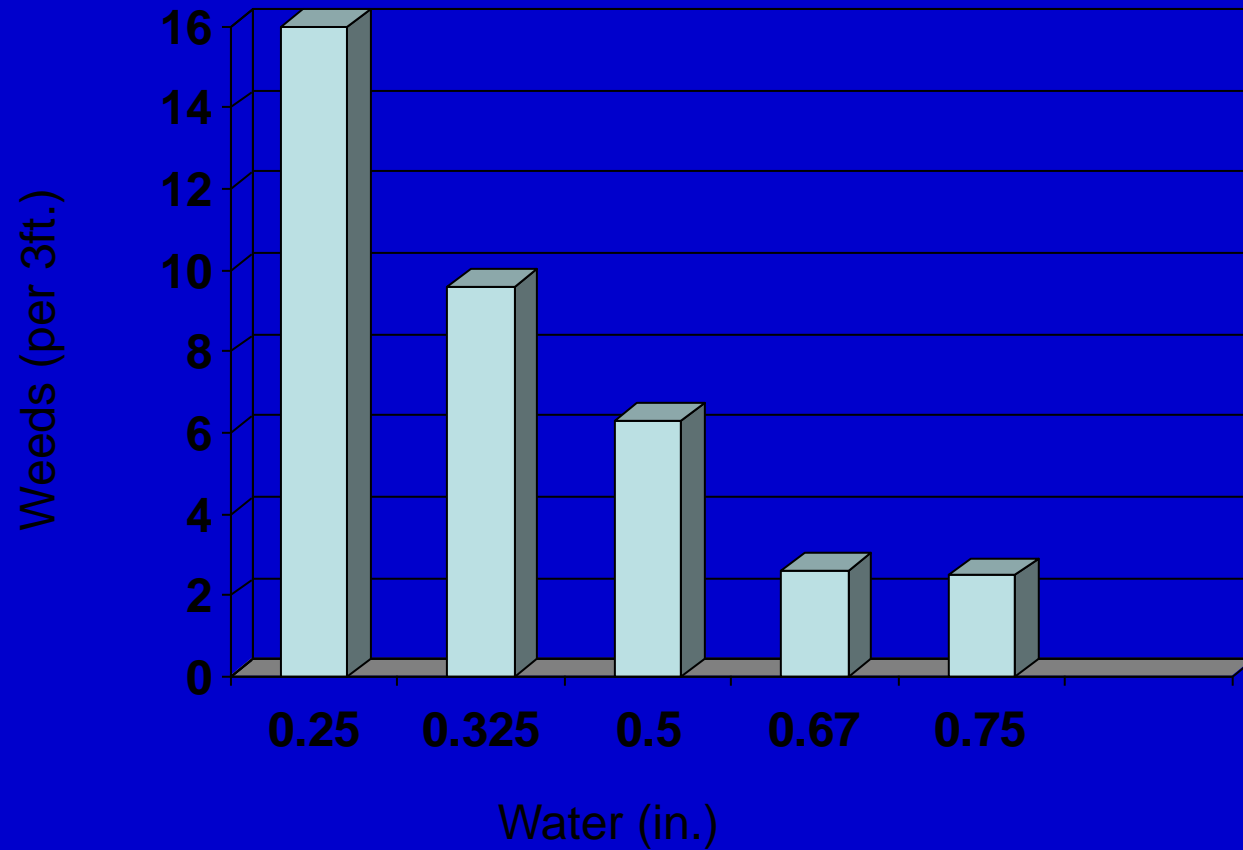


Sprinkler



ZIMMATIC
LYNDAY MFG. CO.

Prefar- Water interaction





Halosulfuron-methyl

- Sandea (Alfalfa, asperagus, melons, rice, beans, tomatoes, peppers, tree nuts, sorghum, cotton, corn, sugarcane)
- Permit (corn, fallow, rice, sugarcane, beans)
- Yukon (with dicamba) - corn, sorghum, sugarcane
- SedgeHammer (Turfgrass, landscape)



Untreated

Sandea 1.0oz.

Sandea-Weeds Controlled

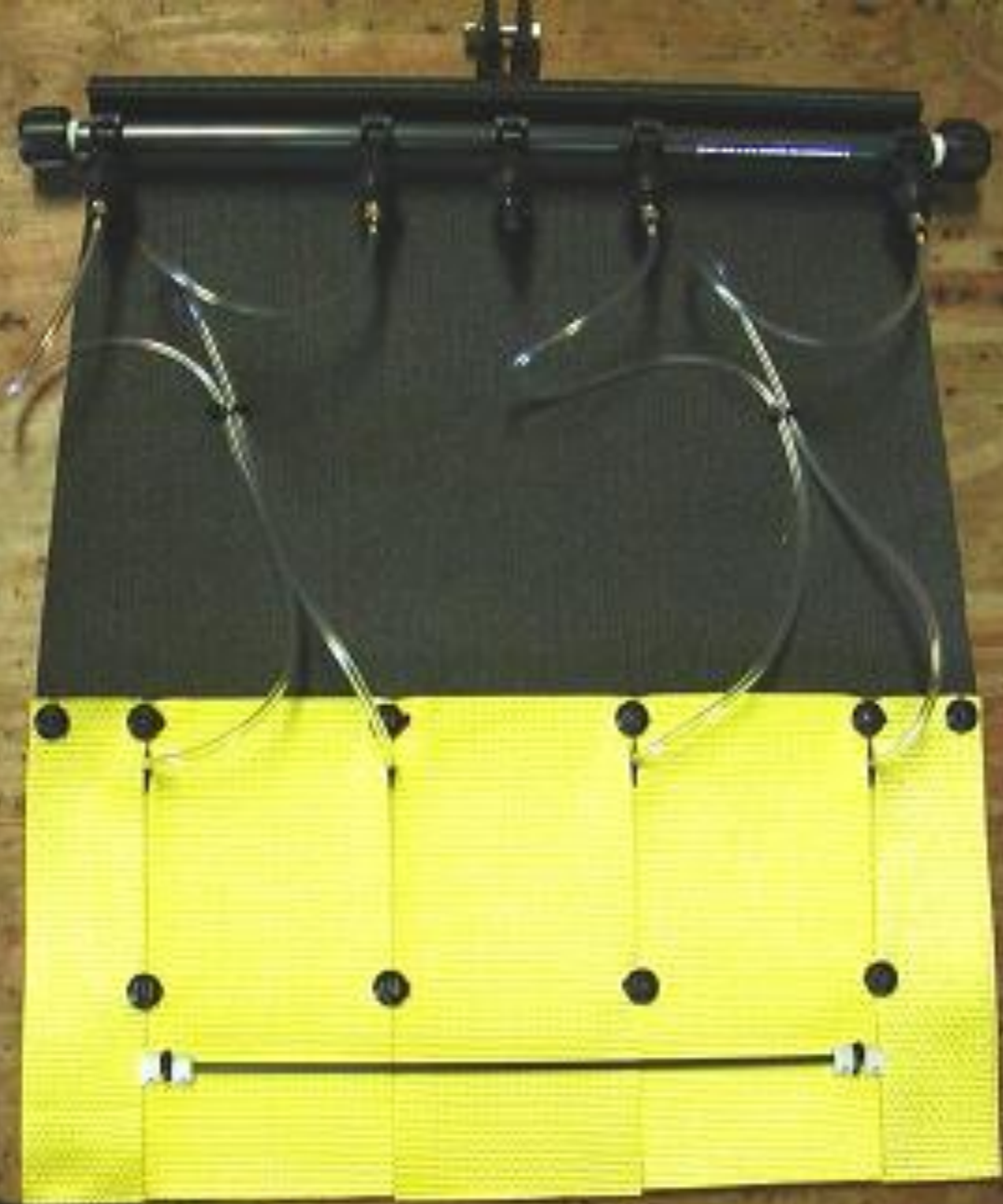
Preemergent Only	Postemergent Only	Both
Purslane	Nutsedge	Pigweed
Lambsquarters	Sesbania	Sunflower
Common Groundsel	Nightshade	Wild Mustard
Shepardspurse		Corn Spurry
Datura		Nettleleaf Goosefoot



No Plastic









Select Max 32 oz. (2X) + 0.25% NIS 4 DAT

End